AMENDMENTS TO THE DRAWINGS

Attached hereto are two (2) sheets of corrected formal drawings that comply with the provisions of 37 C.F.R. § 1.84. The corrected formal drawings incorporate the following drawing changes:

**In Figs. 6 and 7, the label "X" has been replaced by a box that is labeled "END",
and the label "Y" has been removed.**

It is respectfully requested that the corrected formal drawings be approved and made a part of the record of the above-identified application.

REMARKS

Applicant appreciates the Examiner's thorough consideration provided the present application. Claims 1-28 are now present in the application. The drawings have been amended. Claims 1 and 16 are independent. Reconsideration of this application, as amended, is respectfully requested.

Drawings

The drawings have been amended to remove the presence of minor informalities. Applicant has submitted two (2) sheets of corrected formal drawings. Applicant respectfully submits that no new matter is entered. Entry of the above amendments is earnestly solicited.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nohno, U.S. Patent No. 6,239,788, in view of Ikeda, U.S. Patent No. 5,642,134. This rejection is respectfully traversed.

Independent claim 1 recites a combination of steps including "a first touch-position sensing step, which detects values of liquid crystal capacitances formed between the scan lines needed to be detected and the counter electrode, respectively, and detects a scan-line-direction touch position according to the values of the liquid crystal capacitances formed between the scan lines needed to be detected and the counter electrode during idling time in-between writing periods, each of the scan lines turning on sequentially to write image data into the LCD screen in the writing periods", "a charging step, which charges a voltage signal into each of the data lines

needed to be detected after the scan-line-direction touch position is detected" and "a second touch-position sensing step, which detects values of liquid crystal capacitances formed between the data lines needed to be detected and the counter electrode, respectively, and detects a data-line-direction touch position according to the values of the liquid crystal capacitances formed between the data lines needed to be detected and the counter electrode after the voltage signal is charged".

Independent claim 16 recites a combination of elements including "a first sensing circuit, which respectively electrically connects to the scan lines needed to be detected, detects values of liquid crystal capacitances formed between the scan lines needed to be detected and the counter electrode, and detects a scan-line-direction touch position according to the values of the liquid crystal capacitances formed between the scan lines needed to be detected and the counter electrode", "a timing control circuit, which electrically connects to the first sensing circuit and controls the first sensing circuit to detect the liquid crystal capacitances formed between the scan lines needed to be detected and the counter electrode during idling time in-between writing periods, each of the scan lines turning on sequentially to write image data into the LCD screen in the writing periods", "a voltage-signal generating circuit, which electrically connects to the timing control circuit and each of the data lines, wherein the timing control circuit controls the voltage-signal generating circuit to charge a voltage signal into each of the data lines needed to be detected after the scan-line-direction touch position is detected" and "a second sensing circuit, which respectively electrically connects to each of the data lines needed to be detected, detects values of liquid crystal capacitances formed between the data lines needed to be detected and the counter electrode, and detects a data-line-direction touch position according to the values of the

liquid crystal capacitances formed between the data lines needed to be detected and the counter electrode after the voltage signal is charged".

Applicant respectfully submits that the above combination of steps and elements as set forth in independent claims 1 and 16 are not disclosed nor suggested by the references relied on by the Examiner.

In the present invention, the values of liquid crystal capacitances formed between the counter electrode panel and the scan lines are detected, respectively, during the idling time in-between writing periods. As defined in the specification, the writing period is the period in which each of the scan lines turns on sequentially to write image data into the LCD screen. In other words, the idling time is the time interval between the writing periods.

Unlike the present invention, Nohno in FIG. 6 discloses that the coordinate detection operation is performed in an X-coordinate Detection Period (by driving data lines) first, and then a Y-coordinate Detection Period (by driving scan lines)(see also col. 17, lines 56-67.) As shown in FIG. 6 of Nohno, the Y-coordinate Detection Period overlaps with the Display Period (in which the image data are written into the display). Therefore, Nohno fails to teach "detects a scan-line-direction touch position according to the values of the liquid crystal capacitances formed between the scan lines needed to be detected and the counter electrode during idling time in-between writing periods" as recited in claim 1 and "detect the liquid crystal capacitances formed between the scan lines needed to be detected and the counter electrode during idling time in-between writing periods" as recited in claim 16.

In addition, as mentioned, the X-coordinate Detection Period (by driving data lines) occurs before the Y-coordinate Detection Period (by driving scan lines). Therefore, Nohno also

fails to teach "charges a voltage signal into each of the data lines needed to be detected <u>after</u> the scan-line-direction touch position is detected" as recited in claim 1 and "charge a voltage signal into each of the data lines needed to be detected <u>after</u> the scan-line-direction touch position is detected" as recited in claim 16.

With regard to the Examiner's reliance on Ikeda, this reference has only been relied on for its teachings of the counter electrode panel. This reference also fails to disclose the above combinations of steps and elements as set forth in independent claims 1 and 16. Accordingly, Ikeda fails to cure the deficiencies of Nohno.

Accordingly, neither of the references utilized by the Examiner individually or in combination teaches or suggests the limitations of independent claims 1 and 16 or their dependent claims. Therefore, Applicant respectfully submits that independent claims 1 and 16 and their dependent claims clearly define over the teachings of the references relied on by the Examiner.

Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103 are respectfully requested.

CONCLUSION

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Joe McKinney Muncy, Registration No. 32,334 at (703) 205-8000 in the Washington, D.C. area.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant respectfully petitions for a one (1) month extension of time for filing a response in connection with the present application and the required fee of $120.00 is attached herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: June 5, 2006

Respectfully submitted,
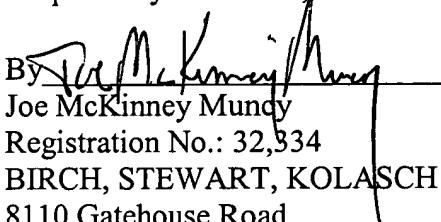
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Attachment: Replacement Sheets